

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

Claims 1-19 (cancelled).

20. (currently amended) A reactor for pyrolytic conversion of biomass material into charcoal and gas comprising, a housing having a proximal end, a distal end and a sealable opening for receiving a removable canister containing said material;

a heater at said distal end located within said housing to ignite biomass material at said distal end;

a first valved gas exit orifice at the proximal end of said housing; a second valved gas exit orifice at the distal end of said housing;

a valved air entry orifice for introducing air to the proximal end of said canister;

insulation surrounding at least a portion of the sides of the canister;

said canister being receivable in said housing such that there is minimal exposure of the contents of said canister to the atmosphere when said sealable opening is open [.];

wherein air entry at said proximal end and ignition of biomass material to form a flame front at said distal end causes a directional draft within said reactor as air flows through said biomass material toward said distal end causing said flame front to progress through said biomass material to said proximal end.

21. (Previously presented) A reactor according to claim 20 wherein said heater comprises a resistance heater.

22. (original) A reactor according to claim 20 further comprising an exterior burner communicating with said second valved gas exit.

23. (original) A reactor according to claim 20 wherein said valved entry orifice comprises a tube passing through the distal end of said housing and having an open end at the proximal end of said canister.

24. (original) A reactor according to claim 20 wherein said housing is vertically positioned so that said proximal end is at the top and said distal end is at the bottom.